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NOTICE OF ALLOWANCE AND FEE(S) DUE

23347 7590 02/09/2010

GLAXOSMITHKLINE CORPORATE INTELLECTUAL PROPERTY, MAI B482 FIVE MOORE DR., PO BOX 13398

RESEARCH TRIANGLE PARK, NC 27709-3398

EXAMINER
CAMPBELL, VICTORIA P

ART UNIT PAPER NUMBER

3763

DATE MAILED: 02/09/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/597,692	08/03/2006	Stanley George Bonney	PB60733-F USW	4937			
TTLE OF INVENTION: METERING RUMP SYSTEM							

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/10/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NO THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used to correspondence including d below or directed off tions	for transmitting the ng the Patent, adva nerwise in Block 1	E ISSUE FEE and PUBI nce orders and notificati , by (a) specifying a new	on of n	ON FEE (if requin naintenance fees wi pondence address;	ed). B II be i and/or	Hocks 1 through 5 st mailed to the current (b) indicating a sepa	tould be correspond rate "FEE	completed where dence address as ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: the Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
FIVE MOORE I	NTELLECTUAL P DR., PO BOX 1339	ROPERTY, M.	AI B482	I be	Certi	ficate	of Mailing or Trans: 3) Transmittal is being ficient postage for firs ISSUE FEE address 1) 273-2885, on the d	denovited	I with the United all in an envelope being facsimile ted below.
RESEARCH TR	IANGLE PARK, N	IC 27709-3398							(Depositor's name)
									(Signature)
									(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INV	ENTOR ATTORNEY DOCKET NO. CON			CONFIR	RMATION NO.	
10/597,692	08/03/2006		Stanley George B	onney		PE	360733-F USW		4937
TITLE OF INVENTION	: METERING PUMP S	YSTEM							
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DU	E PUBLICATION FE	E DUE	PREV. PAID ISSUE	. PAID ISSUE FEE TOTAL FEE(S) DU		I	DATE DUE
nonprovisional	NO	\$1510	\$300		\$0	\$0 \$1810		(05/10/2010
EXAM	INER	ART UNIT	CLASS-SUBCL/	LSS					
CAMPBELL,	VICTORIA P	3763	604-019000		•				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT.	nge of Corresponde "Indication form ned. Use of a Custo A TO BE PRINTEI	carce (1) the names of or agents OR, at (2) the name of registered attorn 2 registered pat listed, no name	of up to tternative a single ney or a ent attor will be	e firm (having as a a gent) and the name: meys or agents. If no printed.	attorn members of up o nam	er a 2 o to e is 3		
PLEASE NOTE: Uni recordation as set forti (A) NAME OF ASSIC Please check the appropri	GNEE			(CITY	and STATE OR CO	DUNT			
4a. The following fee(s) a ☐ Issue Fee ☐ Publication Fee (N ☐ Advance Order - #	o small entity discount j	permitted)	A check is end Payment by cr The Director is	losed. edit car hereby	d. Form PTO-2038	is atta	required fee(s), any de	ficiency, o	
	s SMALL ENTITY state	is. See 37 CFR 1.27					TITY status. Sec 37 Cl		
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) will not be a tes Patent and Trad	ccepted from anyone othe lemark Office.	r than t	he applicant; a regist	tered a	ittorney or agent; or th	e assigned	or other party in
Authorized Signature					Date				
Typed or printed name					Registration No				
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450.	EFR 1.311. The info U.S.C. 122 and 37 USPTO. Time wi rden, should be sen O NOT SEND FEE:	ormation is required to obt CFR 1.14. This collectic Il vary depending upon the tothe Chief Information SOR COMPLETED FOR	ain or r in is est ie indiv i Office RMS TO	etain a benefit by the imated to take 12 m idual case. Any con r, U.S. Patent and T D THIS ADDRESS.	e publ inutes nment: 'radem SENI	ic which is to file (and to complete, includin s on the amount of tir ark Office, U.S. Dep D TO: Commissioner	by the Us g gatherin ne you re- artment of or Patents	SPTO to process) g, preparing, and quire to complete Commerce, P.O. s, P.O. Box 1450,

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RESEARCH TRIANGLE PARK, NC 27709-3398

UNITED STATES PATENT AND TRADEMARK OFFICE

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23347 75	90 02/09/2010		EXAMINER				
GLAXOSMITHI	KLINE	CAMPBELL, VICTORIA P					
CORPORATE INTELLECTUAL PROPERTY, MAI B482			ART UNIT	PAPER NUMBER			
FIVE MOORE DR	L, PO BOX 13398	3763					

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 596 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 596 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability 10/597,692 BONNEY ET AL. Examiner Art Unit VICTORIA P. CAMPBELL 3763

Application No.

Applicant(s)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to 21 January 2010.
- 2. The allowed claim(s) is/are 1,2,4-14,16,18-23 and 25-37.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a)

 All b)

 Some* c)

 None of the:
 - 1. T Certified copies of the priority documents have been received.
 - Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDOMMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date ____
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 8/3/06
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🔲 Other _____.

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DETAILED ACTION

Terminal Disclaimer

The terminal disclaimers filed on December 21, 2009 disclaiming the terminal
portion of any patent granted on this application which would extend beyond the
expiration date of US Patent Application Nos. 10/597703, 10/597678, 10/597624,
10/597683, and 10/597690 have been reviewed and are accepted. The terminal
disclaimers have been recorded.

Information Disclosure Statement

2. The examiner notes that the third document listed on the IDS submitted August 3, 2006 is incorrect and is why the document was not previously considered. However, the examiner has determined which document was intended by the applicant (USPGPub 2004/0007597 A1 to Masuzzo et al) and has amended applicant's IDS and considered the reference as such.

Allowable Subject Matter

- Claims 1, 2, 4-14, 16, 18-23, and 25-37 are allowed as amended by applicant in the claims submitted January 21, 2010.
- 4. The following is an examiner's statement of reasons for allowance: The claims in this application have been allowed because the prior art of record fails to teach or disclose, either singly or in combination, the claimed device of a metering pump system having a storage chamber; a metering chamber movable between a contracted and an

Art Unit: 3763

expanded state, wherein movement of the metering chamber from its contracted state to its expanded state results in the metering chamber being placed in fluid communication with the storage chamber in order to receive a volume of fluid product in excess of the desired dose amount; a bleed mechanism for bleeding the excess volume; and an inlet valve mechanism between the storage and metering chambers having an open state which permits fluid flow from the storage to the metering chamber, and a closed state which prevents flow between the chambers; wherein the inlet valve mechanism is adapted so that it remains closed except when the metering chamber moves from its contracted to its expanded state or wherein negative pressure created in the metering chamber is able to move the inlet valve mechanism from its closed state to its open state.

- The closest prior art of record is Martin (USPN 5,085,351). However, this
 reference fails to teach, disclose, or render obvious the invention as claimed or
 described above.
- 6. Regarding independent claim 1, the closest prior art of record fails to teach among all the limitations or render obvious an inlet valve mechanism which is adapted so that it remains closed except when the metering chamber moves from its contracted to its expanded state. Regarding independent claim 2, the closest prior art of record fails to teach among all the limitations or render obvious an inlet valve mechanism wherein negative pressure created in the metering chamber is able to move the inlet valve mechanism from its closed state to its open state.

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7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VICTORIA P. CAMPBELL whose telephone number is (571)270-5035. The examiner can normally be reached on Monday-Thursday, 7-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nicholas Lucchesi can be reached on 571-272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Victoria P Campbell Examiner, AU 3763

/Nicholas D Lucchesi/ Supervisory Patent Examiner, Art Unit 3763